

June 2008

Welcome to the thirty-second edition of the **MassGIS GISette**, a bi-monthly newsletter e-mailed to over 1700 of our users and partner agencies to keep them informed of data updates, GIS events, and on-going technology developments. This newsletter will not replace more focused e-mails that many of you currently receive. A page on our website has been created for the [GISette](#). There you will find back issues of the GISette and an [online subscription form](#).

While our primary intent in publishing the GISette is to disseminate information related to MassGIS initiatives and data development in particular, we also see the GISette as a means of communicating public agency GIS news. So we encourage readers to send in updates or announcements concerning public agencies that they would like included in the GISette. We particularly want to encourage submission of announcements concerning data development projects. Announcements should be sent to Paul Nutting at paul.nutting@state.ma.us.

MassGIS Celebrates its 20th Anniversary

Twenty years ago, a project originally started to help the state identify potential sites for housing hazardous waste treatment facilities took on a new life as the GIS for the state's Executive Office of Environmental Affairs (EOEA). The acronym MassGIS with its now ubiquitous red logo was born. Not surprisingly, early work for this project involved creating the necessary statewide data layers. The initial MassGIS data layers were: town boundaries, drainage basins, drainage sub-basins, surficial geology, public water supplies, surface waters, and roads. All were created by digitizing information from USGS source maps or processing the newly available USGS electronic digital line graph (DLG) data. Later on the "MassGIS project" expanded with additional EOEA funding to include the 1970 and 1985 land use data layers and the initial protected open space layer.

Besides satisfying the needs of the original project, these early data layers made it possible to quickly demonstrate the power of computer-based mapping (when the necessary data are available!) by enabling analysis of the impact of what was known as the "Cohen Bill" (aka the MWRA Watershed Bill). In an effort to protect water quality, this legislation imposed additional constraints on development taking place within a specified buffer along rivers and around lakes and ponds feeding the Quabbin and Wachusett reservoirs. Early reaction to the legislation included claims that large areas would be impacted. MassGIS was asked to assess the impact of the legislation at the level of individual towns. Using standard GIS capabilities, MassGIS demonstrated that between land already developed or land already protected, the additional acres of land impacted by the bill in each community was substantially less than people thought. This analysis was credited with being a key element in getting the legislation passed.

Following this early success, and providing further proof that with GIS it's the data that are important, MassGIS provided support for a campaign against an outbreak of the mosquito-borne disease Eastern Equine Encephalitis a couple of years later. Maps produced by MassGIS were used to help plan where insecticide would be sprayed, taking into account the locations of developed areas relative to surface waters and sensitive resources.

Looking back at MassGIS' history, there is much more to tell. Look for more information in the next GISette.

Editor's note: Thanks to Michael Turner at Applied Geographics for providing some of the historical details for this article.

Database Updates

- **EOT-OTP Roads Updated** - 6/10/2008
The Yearend 2007 release is now available for the EOT-OTP Roads datalayer. Also updated are the Major Roads and Major Routes layers.
- **New MBTA Bus Routes and Stops Layers** - 5/16/2008
These data layers represent bus routes and stops within the Massachusetts Bay Transportation Authority (MBTA) public transit system. The layers were developed by the Central Transportation Planning Staff (CTPS) and are based on data provided by the MBTA as of May 2007.
- **Trains Layer Updated** - 4/30/2008
The Trains layers -- rail lines, MBTA Commuter Rail routes, and stations -- have been updated to include the Greenbush line and other geometry and attribute fixes.

Staff News and Meeting Announcements

Goodbye

MassGIS is losing two staff; one a long timer, and the other an intern. Saul Farber, who programmed the capabilities behind our web mapping services – services that most of you see as our on-line data viewer, OLIVER - for the past four years, is moving on. During Saul's tenure, MassGIS was the recipient of national awards related to his and Aleda Freeman's work on our web-services. In addition to his major online mapping contributions, his informative and easy going personality will be missed. Ben Krepp has been our intern for the past two semesters. While Ben has proven very capable in working on some data development tasks, his primary contribution has been developing behind-the-scenes applications, in particular a map generating tool and a tool for exporting all the data (this typically involves data from multiple sources and types) from an ArcGIS project to an ESRI personal geodatabase file. In addition, Ben made significant upgrades to our map and data orders processing application. We wish both Saul and Ben the best of luck in their future endeavors.

Using Free Open Source Software to Create Web-Based Data Viewers

Thursday, July 10, 2008 10:00 - 12:00 at the Worcester Public Library

By Saul Farber, developer of the MassGIS web mapping services now with PeopleGIS, and Aleda Freeman, MassGIS

Sponsored by the New England Chapter of URISA, this talk will be divided into two halves. In the first half Saul will discuss the current state of Open Source GIS web solutions, including client-side toolkits (OpenLayers, Fusion) and spatial servers (MapServer, GeoServer). In the second half Saul and Aleda will provide a live demonstration of loading shapefile data into GeoServer, then showing that data on Google© maps, in Google Earth© and also on a web map, which they will mashup with orthophotos from MassGIS.

For speaker bios and a map to the Worcester Public Library, as well as for information about two other similar talks being offered in Portsmouth, NH on July 9th and in West Springfield on July 14th, visit the [NEURISA web site](#).

3D Geospatial Day

Tuesday, July 15, 2008

Harvard University Graduate School of Design (GSD)
Gund Hall, 48 Quincy Street, Cambridge, MA

[Massachusetts Geographic Information Council Seminar Series](#)

View PowerPoint presentations from past meetings [here](#), including the latest CAD meets GIS presentations.

Any comments or suggestions about the GISette are welcome – send to paul.nutting@state.ma.us.

MassGIS-The Commonwealth's Office of Geographic and Environmental Information is located within the Executive Office of Energy and Environmental Affairs and is charged with the collection, enhancement, storage and dissemination of the Commonwealth's geographic data.

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